

***Remarks***

Upon entry of the foregoing amendment, claims 1-9, 11-22, and 36-39 are pending in the application, with claims 1 and 36 being the independent claims. Claims 10 and 23-35 are sought to be cancelled without prejudice to or disclaimer of the subject matter therein. Claims 2-5 and 22 have been amended to correct informalities. These changes are believed to introduce no new matter, and their entry is respectfully requested. Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

***Objection to the Claims***

In the Office Action, the Examiner objected to claims 2-5 and 22 due to matters of form. Applicants have amended claims 2-5 and 22 to improve their form as suggested by the Examiner.

***Objection to the Specification***

In the Office Action on page 2, the Examiner objected to the specification because of various informalities. Specifically, the Examiner objected to replacement paragraph [0066] because "it is unclear whether the reference to '425 mils ...' is appropriate since the description of this paragraph pertains to 'Fig. 8' while '425 mils' limitation appears to relate to the 'fig. 7' description." Applicants submit that Fig. 8 on formal drawing sheet 13 contains typographical errors in the label "432 mils TO BALUN

INDICATOR." In Fig. 8, as originally filed, this label correctly stated "425 mils to BALUN INDUCTOR." Applicants have amended Fig. 8 on drawing sheet 13 to reflect the label used in originally filed Fig. 8. Applicants submit that this amendment addresses the informalities raised by the Examiner.

Applicants have amended replacement paragraph [0072] to include a separation between "signal 122" as suggested by the Examiner.

On page 2 of the Office Action, the Examiner objected to the specification because of informalities related to reference labels in the Figures. Applicants have amended paragraph [0039] to refer to the reference value in FIG. 1B. Paragraph [0039] now recites " FIG. 1B includes an exemplary impedance value of  $75\Omega$  at outputs 112 and 114." Applicants have amended paragraph [0040] to refer to the reference labels in FIGs. 2A and 2B. Paragraph [0040] now recites "In FIGs. 2A and 2B, the reference labels "s" and "w" represent conductor spacing width; the reference label "h" represents dielectric height; and the reference label " $\epsilon_r$ " represents dielectric constant.

The Examiner objected to Fig. 5B stating that "all reference labels except '512'" need explicit description in the specification. Applicants have amended paragraph [0059] to correct the reference number associated with the balun. Paragraph [0059] now recites "Referring to FIG. 5B, an embodiment of balun 500 is presented as balun 550 ... Balun 550 shows common reference numbers with the balun 500 that was discussed with reference to FIG. 5A." Applicants submit that this amendment clarifies the use of the reference numbers in Fig. 5B.

Applicants have amended Fig. 7 to replace the label "(.425")" with the label "425 mils" to provide consistency with the specification.

The Examiner further objected to the dimension labels used in Figs. 8, 10, and 11. Applicants have amended paragraph [0066] to recite "[t]he embodiment of FIG. 8 is presented with exemplary dimension values for the balun 800 including widths equal to 7 mils, 21 mils, 28 mils, 35 mils, and 63 mils and spacing between elements equal to 21 mils, 75 mils and 425 mils". Applicants have amended paragraph [0070] to recite "[t]he embodiment of FIG. 10 is presented with exemplary dimension values for the balun 1000 including widths equal to 0.007", 0.011", 0.016", 0.020", 0.030", 0.050", 0.480", and 0.525", spacing between elements equal to 0.020" and 0.250", and diameters equal to 0.010". Applicants have amended paragraph [0073] to recite "[t]he embodiment of FIG. 11 is presented with exemplary dimension values for the balun 1100 including widths equal to 0.007", 0.021", 0.030", 0.060", and 0.238" and a diameter equal to 0.010." Applicants submit that these amendments provide sufficient description of the dimension labels used in Figs. 8, 10, and 11. Furthermore, the dimensions are clearly repeated in the mentioned Figures.

Based on the amendments and discussion above, Applicants request that the specification objections be removed.

***Objections to the Drawings***

On page 2 the Examiner objected to Fig. 8 because the label "'BALUN INDICATOR' should correctly be -- BALUN INDUCTOR--." As discussed above, Applicants have amended Fig. 8 as suggested by the Examiner.

The Examiner also objected to Fig. 10 because "reference label '512' still needs to be provided as per the description of fig. 10 at paragraph [0071]." Applicants note that

paragraph [0071] describes the location of ground as "[i]n the embodiment shown in FIG. 10 ground 512 is located on layer two under everything except balun. There is also a ground on layer four located beneath everything." Therefore, 512 will not appear in the top-down view of Balun 1000. Because paragraph [0071] sufficiently describes the location of the ground, Applicants have deleted reference number 512 from paragraph [0071]. Accordingly, Applicants request that the drawing rejection be removed.

***Rejections under 35 U.S.C. § 102***

Claim 22 was rejected under 35 U.S.C. §102(b) as being anticipated by Tang, U.S. Patent No. 6,483,415 (Tang). Applicants respectfully submit that Tang is not available as prior art.

The present application properly claims benefit under 35 U.S.C. §119(e) to provisional application 60/262,629, filed January 22, 2001. (*See* Application Data Sheet; Specification, pg. 1). Therefore, because at least claim 22 is fully supported under 35 U.S.C. §112 by the provisional application, the effective filing date to be used for at least claim 22 is the filing date of the provisional application, January 22, 2001. The filing date of Tang is May 21, 2001. Because Tang was filed after the effective filing date of at least claim 22, Applicants submit that Tang is not available as prior art. Applicants therefore respectfully request that the Examiner reconsider and withdraw this ground of rejection.

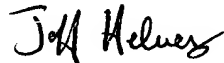
***Conclusion***

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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